

MISHCHENKO, Georgiy Leonidovich; NEYMAN, Aleksandr Frantsevich;
KHAS'YAN, T.I., red.; TSUKHLO, I.L., red.

[Technology of the transparent finishing of panel elements
of furniture] Tekhnologiya prozrachnoi otdelki shchitovykh
elementov mebeli. Moskva, Izd-vo "Lesnaya promyshlennost',"
1964. 242 p. (LIRA 18:1)

KHASYSKI, M.; KEL'M, M. [Kelm, M.]; SHIDLOVSKAYA, S. [Szydlowska, S.];
GORAK, B. [Horak, B.]; RIKHTER, V.

From public reports of the heads of the delegations of socialist
countries. Tekh. est. 2 no.8:7-11 Ag '65. (MIRA 18:9)

1. Direktor TSentra promyshlennoy estetiki, khudozhestvennogo
proyektirovaniya i konstruirovaniya Narodnoy Respubliki Bolgarii
(for Khasyski).
2. Predsedatel' Soveta po khudozhestvennomu kon-
struirovaniya Germanaskoy Demokraticheskoy Respubliki (for Kel'm).
3. General'nyy sekretar' Soveta po tekhnicheskoy estetike pri
Predsedatele Soveta Ministrov Pol'skoy Narodnoy Respubliki (for
Shidlovskaya).
4. Zamestitel' ministra promyshlennosti tovarov
shirokogo potrebleniya, zamestitel' predsedatelya Soveta po
tekhnicheskoy estetike Chekhoslovatskoy Sotsialisticheskoy
Respubliki (for Gorak).
5. Direktor TSentra khudozhestvennogo
konstruirovaniya v Zagrebe Sotsialisticheskoy Federativnoy
Respubliki Yugoslavii (for Rikhter).

ACC NR: AP6027295

SOURCE CODE: UR/0133/66/000/008/0738/0741

AUTHOR: Tsvetkova, V. K.; Khatalakh, R. F.

ORG: "Elektrostal'" Plant (Zavod "Elektrostal'")

TITLE: Effect which the addition of molybdenum, tungsten and other elements has on the properties and structure of heat resistant nickel alloys in the cast state

SOURCE: Stal', no. 8, 1966, 738-741

TOPIC TAGS: nickel alloy, metal crystallization, mechanical property, molybdenum containing alloy, tungsten containing alloy

ABSTRACT: The authors study the effect of introducing molybdenum, tungsten and other elements on the properties and structure of 7 compositions of KhN66VMTYu heat resistant nickel alloys in the cast state. It was found that liquidus and solidus temperatures rise as tungsten content is increased in these alloys. Increasing molybdenum content from 5 to 10% has no effect on the critical crystallization point of KhN66VMTYu alloy. The use of iron instead of nickel lowers the liquidus temperature and reduces the crystallization interval. Increasing the degree of alloying for this type of alloy forms internal cracks throughout the bottom part of the ingots during cooling in air. Impact strength and mechanical properties of the cast structure are reduced during hot plastic deformation if the weight of the ingots is increased from

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UDC: 669.14.018.45

ACC NR: AP6027295

APPROVED FOR RELEASE: 09/17/2001

CIA-RDP86-00513R000721910013-

210 to 500 kg. However, regardless of ingot size, the impact strength of specimens taken from the acicular crystal zone is higher than that of specimens from the uniaxial crystal zone by a factor of 1.5-2. The maximum impact strength approaches that observed in specimens of deformed metal cut along the acicular crystals. The breaking strength and ductility characteristics of the various crystal zones behave similarly as the temperature is raised from 800 to 1250°C: the breaking strength decreases uniformly, and the relative elongation and constriction reach a maximum at 1000-1150°C. Orig. art. has: 5 figures, 1 table.

SUB CODE: 11/ SUBM DATE: None/ ORIG REF: 002

Card 2/2

I. 08121-67 EWT(m)/EWP(w)/EWP(t)/ETI LJP(c) JD/HW/JT-2/GD
 ACC NR: AT6034457 (N) SOURCE CODE: UR/0000/66/000/000/0205/0208
 AUTHOR: Khatalakh, R. F.; Krasnova, I. A.; Dubrovina, I. N.; Zimina, L. N.; Kosheleva, G. F.
 ORG: none
 TITLE: EP404 and EP454 economical heat-resistant alloys
 SOURCE: AN SSSR. Institut metallurgii. Svoystva i primeneniye zharoprochnykh splavov (Properties and application of heat resistant alloys). Moscow, Izd-vo Nauka, 1966, 205-208
 TOPIC TAGS: iron nickel alloy, aluminum containing alloy, high temperature alloy, molybdenum containing alloy, tungsten containing alloy, chromium containing alloy/EP404 alloy, EP454 alloy
 ABSTRACT: Two new EP404 and EP454 nickel-iron base wrought heat-resistant alloys have been developed as less expensive substitutes for EI867 and EI827 nickel-base alloys intended for short-time operation under high stresses. The new alloys are available in the form of forgings and rolled stock. Both can be hot worked in the 950—1200C range compared with the 1050—1150C range for EI827 and EI867 alloys. The heat treatment of EP404 and EP454 alloys includes annealing for 6 hr at 1175—1200 and 1150—1175C, respectively, followed by air cooling and
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L 08424-67

ACC NR: AT6034457

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aging at 750—800C for 10 hr. The heat-treated alloys have high strength and ductility in the 20—800C range comparable to those of EI827 and EI867 alloys. EP404 alloy has a high yield strength (80 kg/mm²) at 20—800C and EP454 alloy has an impact strength of about 12—19 kg.m/cm² in the 930—1200C range. Both alloys soften appreciably at temperatures above 800C. The rupture strength of EP404 and EP454 alloys at 750C was practically the same as that of EI867 and EI827 alloys. The 100-hr rupture strength of EP454 alloy at 850C was 20 kg/mm² and the 200-hr rupture strength at 800C was 25 kg/mm². EP404 alloy has higher characteristics of heat resistance [unspecified] than EP454 alloy. Prolonged aging of EP404 alloy at 800C resulted in the precipitation of the brittle ϵ -phase⁶ (an Fe₇W₆-type phase containing about, wt%, 14 Ni, 10 Cr, 11 Fe, 37 Mo, 28 W). This can be avoided by annealing at 1000C and subsequent aging. Stressless aging of EP404 alloy at 750C brought about no changes in the structure or hardness. However, aging under a stress of 50 kg/mm² for 0.5—10 hr caused intensive precipitation of the γ' -phase (Ni₃Al) with no ϵ -phase precipitation. Aging of EP454 alloy at 750 and 800C with or without stress changed only slightly the alloy hardness. No structural change was observed in EP404 and EP454 alloys with aging at 750C for 100 hr, indicating the structure stability of the alloys. V. V. Topilin, T. G. Pegova, V. M. Romashov, A. P. Boyarinov, V. K. Tsvetkova and N. D. Orekhov participated.

Card 2/3 1s

L 08424-67
ACC NR: AT6034457

in the development of the new alloys. Orig. art. has: 3 figures and
1 table.

SUB CODE: 11/ SUBM DATE: 10Jun66/ ATD PRESS: 5103

Card 3/3 18

L 4177-66 EWT(m)/EWP(e)/EWP(l)/EWA(d)/EWP(v)/T/EWP(t)/EWP(z)/EWP(s)/EWP(b)/EWA(e)	
ACC NR: AP5024405JD/HM/HM/JG	SOURCE CODE: UR/0286/65/000/015/0083/0083
INVENTOR: Estulin, G. V.; Zimina, L. M.; Kosheleva, G. P.; Topilin, V. V.; Boyarinova, A. P.; Tavetkova, V. K.; Khatakh, R. P.; Shnyakin, M. B.; Polyakov, K. M.; Mel'nikov, M. V.; Belyakova, K. A.; Il'in, A. A.; Morozov, B. S.; Bogdanovskiy, S. P.; Khrakovskaya, P. S.	
TITLE: Wrought, heat-resistant, nickel-base alloy. Class 40, No. 173418 (announced by Central Scientific Research Institute of Ferrous Metallurgy im. Bardin (Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii); s-d "Elektrostal" im. I. P. Tevosyan)	
SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 15, 1965, 83	
TOPIC TAGS: alloy, nickel alloy, chromium containing alloy, molybdenum containing alloy, tungsten containing alloy, titanium containing alloy, aluminum containing alloy, carbon containing alloy, beryllium containing alloy, cerium containing alloy	
ABSTRACT: This Author Certificate introduces a wrought, heat-resistant, nickel-base alloy with improved mechanical properties and weldability. The alloy contains 17 to 20% chromium, 8-12% molybdenum, 0-6% tungsten, 2-3% titanium, 1-2% aluminum, 0.1% max carbon, 6% max iron, 0.01% max sulfur, 0.01% max phosphorus, 0.5% max manganese, 0.6% max silicon, 0.01% max boron, and 0.02% max cerium. [AZ]	
SUB CODE: 44/	ORIG REF: 000/ OTH REF: 000/ ATD PRESS: 4/28
Card 1/2	UDC: 669.245

KHATAMEEKOV, A.Yu.

Some results of the study of the formation of the local structures
of the Mubarek group of fields. Uzb. geol. zhur. 9 no.1;64-72 '65.
(MIRA 18:5)

1. Institut geologii i razrabotki nefitanykh i gazovykh mestorozhdeniy
Gosudarstvennogo geologicheskogo komiteta SSSR.

KHATAMBEKOV, A. Yu.

Geology of Mesozoic sediments in Kagan structures of the Bukhara-Khiva petroleum and gas province. Trudy MINKHIGP no.27:266-280 '60. (MIRA 13:9)

(Amu Darya Valley--Geology)

LARIN, V.I.; KHATAMBEKOV, A.Yu.

Conditions governing the formation of oil and gas pools in
fields of the Mubarek group (western Uzbekistan). Izv.vys.
ucheb.zav.; neft' i gaz 5 no.4:9-13 '62. (MIRA 16:1)

1. Moskovskiy institut neftekhimicheskoy i gazovoy promyshlen-
nosti imeni akademika I.M.Gubkina.
(Uzbekistan--Petroleum geology)

KHATAMBEKOV, A.Yu.

Boundary of the Upper Jurassic and Lower Cretaceous sediments in
western Uzbekistan. Trudy MINKHIGP no.43:162-167 '63.
(MIRA 17:4)

ACC NR: AT6025884

(N)

SOURCE CODE: UR/0000/65/000/000/0118/0127

AUTHOR: Khatamkulov, G.

ORG: none

TITLE: Objective analysis of the relative geopotential field above oceans

SOURCE: AN UzSSR. Institut matematiki. Dinamicheskaya meteorologiya (Dynamic meteorology). Tashkent, Izd-vo Nauka UzSSR, 1965, 118-127

TOPIC TAGS: meteorology, ~~meteorological chart~~, ~~meteorological parameters~~, correlation function, autocorrelation function, *meteorologic observation*

ABSTRACT: A method for analysis of meteorological fields in regions with sparse networks of meteorological stations is described. The method can be used for ocean regions and is based on the fact that there exists a direct relationship between relative heights of isobaric surfaces and their average temperatures. Consequently, there is a relationship between heights of isobaric surfaces and temperatures of the ground and sea surface. Autocorrelation functions for the H ⁵⁰⁰/₁₀₀₀ layer and temperature of the earth's surface and their mutual correlation function are found from data collected by 60 weather stations located in continental Europe and the Soviet Union. Orig. art. has: 24 formulas and 4 figures.

SUB CODE: 04/ SUBM DATE: 14Dec65/ ORIG REF: 003

Card 1/1

KHATAMOV, A. A.

KHATAMOV, A. A. --"The Physical Conditions of the Ground Layer of the Atmosphere and Their Effect on the Rate of Evaporation, Based on Data from Various Methods of Measuring Evaporation." Moscow, 1955. (Dissertation for the Degree of Candidate in Physicomathematical Sciences.) Min Higher Education USSR.

95.: Knizhnaya Letopis', No 7, 1956.

KEATAMOV, A.A.

Turbulence factor in the case of unstable stratification of
the surface layer. Izv. AN Uz. SSSR. Ser. fiz. mat. nauk 6
no.2:21-27 '62. (MIRA 15:9)

1. Andizhanskiy pedagogicheskiy gosudarstvennyy institut.
(Atmospheric turbulence)

KHATAMZADE, M. Ya.

Treatment of a peptic ulcer with bicaltin. Azerb. med. zhur.

no.9:36-39 S '62

(MIRA 18:1)

DYUKER, Al'ber, prof. astronomii; GETLEND, Kennet; KHAFAZ, Mustafa Mukhammed, doktor; KINDSEY, prof.; KHATANAKA, Takeo, astronom, prof.; ZENGER, Eugen, prof., spetsialist v oblasti raketnoy tekhniki (Federativnaya Respublika Germanii); LOVELL, B., prof.; NEVIN, T., prof. (Irlandiya); KHADZHIOLOV, A., akademik (Bolgariya); LUNTS, M., prof.; MATOVICH, V.; UEYL, L., doktor, spetsialist po kosmologii (SShA); VAYD'YA, V.M., doktor; CHEMBERLEN, D.; CHZHAO TSZYU-CHZHAN [Caho Chiu-chang]; NAGATA, I.

World scientists about the flight of A. Nikolaev and P. Popovich.
Av.1 kosm. 45 no.10:31-33 '62. (MIRA 15:10)

1. Direktor Frantsuzskogo obshchestva kibernetiki (for Dyuker).
2. Vitse-prezident Obshchestva mezhplanetnykh soobshcheniy, Angliya (for Geltend).
3. General'nyy sekretar' nauchno-issledovatel'skogo tsentra Ob'yedinennoy Arabskoy Respubliki (for Khafaz).
4. Chlen gosudarstvennogo komiteta po atomnoy energii, Gana (for Lindsey).
5. Tokiyskiy universitet (for Khatanaka).
6. Direktor radioastronomicheskoy observatorii Dzhodrell-benk, Velikobritaniya (for Lovell).

(Continued on next card)

DYUKER, Al'ber, prof.astronomii---(continued) Card 2.

7. Predsedatel' astronavticheskogo obshchestva, Pol'sha (for Lunts). 8. Sekretar' yugoslavskogo astronomicheskogo i raketnogo obshchestva (for Matovich). 9. Zamestitel' direktora Natsional'noy fizicheskoy laboratorii, Indiya (for Vavd'ya). 10. Predstavitel' Kh'yustonskogo tsenta po sozdaniyu kosmicheskogo korablya s ekipazhem, SSHA (for Chamberlen). 11. Direktor Instituta geofiziki Kitayskaya Narodnaya Respublika (for CHZHAO TSZYU-CHZHAN). 12. Direktor Instituta radiovoln, Yaponiya (for Nagata).
(Space flight)

ZAKHAROVA, M.I.; KHATANOVA, N.A.

Investigating structural changes during γ ($\gamma + \alpha$) phase transformations
in iron nickel alloys. Issl. po zharopr. splav. 3:178-182 '58.

(MIRA 11:11)

(Iron-nickel alloys--Metallorgraphy) (Phase rule and equilibrium)

AUTHORS: Zakharova, M.I. and Khatanova, N.A. 70-3-3-28/36

TITLE: The Mutual Orientation of Crystals of the α and σ Phases on the Decay of the Solid Solution in Alloys of Iron and Vanadium (Vzaimnaya oriyentirovka kristallov α -i σ -faz pri raspade tverdogo rastvora v splavakh zheleza s vanadiyem)

PERIODICAL: Kristallografiya, 1958, Vol 3, Nr 3, pp 376 - 378 (USSR)

ABSTRACT: Fe-V alloys at temperatures above 1 234 °C form a solid solution α with a cubic face-centred lattice. Below this temperature the solid solution decays and a σ phase with the β - U structure having 30 atoms per unit cell separates. An alloy of 26% V in Fe was annealed at 975 °C and decayed to the two phases. Monocrystalline specimens, prepared by heating for 60 hours at 1 350 °C and quenching in water were used for X-ray examination. Specimens of 1 cm dia. were thus converted to single crystals and were cut up for examination. Laue photographs were taken after different annealing times at 975 °C. For times of 1-30 hours no changes were evident. After 40 hours spots showed that the nuclei of the σ phase were oriented parallel to the 001 plane of the α phase. After Card 1/2 155 hours' annealing the orientation was seen to be such that

70-3-3-28/36
The Mutual Orientation of Crystals of the α and σ Phases on the
Decay of the Solid Solution in Alloys of Iron and Vanadium

the fourfold axes of the two phases were parallel. The $[110]$
axes of the two phases are also parallel. Microscopic examin-
ation of polycrystalline specimens after etching showed rect-
angular figures which confirm this. There are 5 figures and
1 German and 1 English references.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet imeni
M.V. Lomonosova (Moscow State University imeni
M.V. Lomonosov)

SUBMITTED: April 22, 1957
Card 2/2

AUTHORS: Zakharova, M.I. and ~~Khatanova~~, N.A. 70-3-3-29/36

TITLE: The Substructure of Crystals of the γ Solid Solution of Nickel in Iron During Polymorphic Transformation (Substruktura kristallov γ -tverdogo rastvora nikelya v zheleze pri polimorfnom prevrashchenii)

PERIODICAL: Kristallografiya, 1958, Vol 3, Nr 3, pp 378 - 381 (USSR)

ABSTRACT: The investigation of the transformation $\gamma \rightarrow \gamma + \alpha$ in an alloy of iron with 32% nickel by the methods of X-ray and microscopic analysis showed that the initial stage proceeds following the martensitic type of transformation scheme. In this the layers of the α -phase are oriented parallel to the 111 plane of the γ -phase. Because of the low value of the elastic limit of the Fe-Ni alloys at 400 °C, the coherence of the lattices of the γ - and α -phases is destroyed in the initial stages of the transformation and the further growth of the nuclei of the α -phase proceeds by diffusion. In the matrix round the nuclei a zone of plastic deformation is formed clearly distinguishable under microscopic investigation. There are 4 figures and 7 references, 1 of which is Soviet, 1 German and 5 English.

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70-3-3-29/36

The Substructure of Crystals of the γ Solid Solution of Nickel in
Iron During Polymorphic Transformation

ASSOCIATION: Moskovskiy gosudarstvennyy universitet
imeni M.V. Lomonosova (Moscow State University
imeni M.V. Lomonosov)

SUBMITTED: March 22, 1957

Card 2/2

SOV/126-6-3-12/32

AUTHORS: Zakharova, M. I., Igantova, I. A. and Khatanova, N. A.

TITLE: Investigation of the Phase Transformation $\gamma \rightarrow (\gamma + \alpha)$
in Alloys of Iron with Nickel (Issledovaniye fazovogo
prevrashcheniya $\gamma \rightarrow (\gamma + \alpha)$ v splavakh zheleza s nikelom)

PERIODICAL: Fizika Metallov i Metallovedeniye, 1958, Vol 6, Nr 3,
pp 475-479 (USSR)

ABSTRACT: The polymorphous transformations in alloys of iron with 30 and 32% Ni are investigated since in spite of the fact that much work has been done on the problem of $\gamma \rightarrow (\gamma + \alpha)$ transformations in Fe-Ni alloys (Ref 1), the extreme stability of the non-equilibrium state in these alloys has so far not been satisfactorily clarified. The alloys were produced from electrolytic iron and electrolytic nickel. After casting, the alloys were subjected to homogenization annealing at 1000°C for ten hours, then to heating for 18 hours at 600°C which was followed by quenching in water. The single crystals were produced by the method of recrystallisation at 1200°C; after continuous annealing for 60 hours, crystals of 20 mm² grew in 1 mm thick plates. The investigations were effected by X-ray

Card 1/3 and microscopic analysis of polycrystalline specimens and

SCV/126-6-3-12/32

Investigation of the Phase Transformations $\gamma \rightarrow (\gamma + \alpha)$ in Alloys of Iron with Nickel

X-ray analysis of static single crystals. The process of polymorphous transformation was studied for isothermal heating at a temperature of 400°C; at this temperature a 32% Ni containing alloy in the equilibrium state should contain about 27% of the α -phase. For investigating the $\gamma \rightarrow (\gamma + \alpha)$ transformation by X-ray structural analysis, powder was filed from the homogenized specimen which was heated at 600°C for 20 hours and then subjected to isothermal annealing at 400°C. The X-ray patterns were photographed using iron radiation in cameras of 114 cm dia; the specimen dia. equalled 0.4 mm. It was established that at 400°C the transformation is very slow. Deformation of the alloys at room temperature does not only accelerate the process of γ to α transformation; deformation of an alloy after being subjected to martensite transformation at -196°C will accelerate also the reverse γ to α transformation. At temperatures above the martensitic point, the initial stage of the γ to α transformation proceeds

Card 2/3 according to the relations governing the reconstruction of

Investigation of the Phase Transformation
of Iron with Nickel

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$\gamma \rightarrow (\gamma + \alpha)$ in Alloys

the lattice in the case of martensitic transformations. The forming inter-layer of the γ -phase is located parallel to the plane (111) of the γ -phase. Apparently for a tempering temperature of 400°C the lattice coherence is disturbed in the initial stage of transformation, which brings about a braking of the transformation process. Further increase in the growth of the nuclei of the α -phase is by diffusion; deformation zones are formed in the matrix around the nuclei.

There are 2 figures, 1 table and 4 references, 2 of which are Soviet, 2 English.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet imeni
M. V. Lomonosova (Moscow State University imeni
M. V. Lomonosov)

SUBMITTED: June 23, 1956 (initially), Feb. 8, 1957 (after revision).

1. Iron-nickel alloys--Transformations
2. Iron-nickel alloys
- Stability
3. Iron-nickel alloys--Casting
4. Iron-nickel alloys
- Heat treatment
5. Iron-nickel alloys--X-ray analysis

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ZAKHAROVA, M.I.; KHATANOVA, N.A.

Investigation of structural changes in Fe-Ni alloys during the
polymorphic $\gamma \rightarrow \gamma + \alpha$ transformation. Izv. AN SSSR. Ser. fiz.
22 no.10:173-176 U '58. (MIRA 12:3)

1. Moskovskiy gosudarstvennyy universitete im. M.V. Lomonosova.
(Iron-nickel alloys)

AUTHORS: Zakharova, M. I., Ignatova, I. A.,
Semenova, L. A., Khatanova, N. A.

TITLE: An Investigation of the Phase Composition of Iron-Vanadium
and Iron-Chromium Alloys (Issledovaniye fazovogo sostava
splavov zheleza, s vanadiyem i zheleza s khromom)

PERIODICAL: Doklady Akademii Nauk SSSR, 1958, Vol. 119, Nr 3,
pp. 498-500 (USSR)

ABSTRACT: Though there is a domain of the σ -phase in the state
diagrams of the alloys in question which passes over into
the domain of solid solutions of the α -phase at $>1234^{\circ}\text{C}$
for Fe-V-alloys and at 820°C for Fe-Cr-alloys, these trans-
formations are assumed to be more complicated, because
these alloys are transformed rapidly in the single-phase
region of the σ - as well as of the α -phase. Thus the
brittleness occurs very obviously after annealing at
 $400-550^{\circ}\text{C}$ in these alloys that belong to the single-phase
region. The plasticity is here reduced to zero, by this
their practical applicability is restricted. According to
references 3 and 4 a solid solution rich in chromium is
assumed to precipitate at low annealing temperatures. An

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An Investigation of the Phase Composition of Iron-Vanadium
and Iron-Chromium Alloys

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modification of the properties which does not correspond to
the single-phase structure of the solid solution was
observed also above the transformation temperature from
 σ - into the α -phase (ref. 6,7). It is difficult to be
explained by the atomic regulation which is assumed at low
as well as at high temperatures by several authors (ref 7).
In the present paper the structure of the alloys in
question was to be investigated after a heating between
 1400 and 600°C with quenching in water. The investigation
was carried out by means of X-ray diffraction methods in
the polycrystal and by means of microscopical analysis. The
alloys were homogenized after casting at 1300°C from 20 to
100 hours and immediately afterwards quenched in water.
Structure of the iron-vanadium-alloys. The radiographs of
the powder obtained by means of a file were taken with a
chromium radiation. After a homogenization at 1300°C these
alloys are (with a vanadium content of 28,5-74 %) not
single-phase, but two-phase. It was proved microscopically
that on a background of the crystals of the α -phase

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An Investigation of the Phase Composition of Iron-Vanadium and Iron-Chromium Alloys

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microscopical and radiographic investigation showed that the alloys with 35, 42 and 48 % Cr consist of the α - and β -phase crystals in the case of annealing at 1300°C. The amount of the β -phase decreases with dropping temperature (figure 1,2). In the chromium-iron-alloys with 35-48 % Cr the phase transformations consist of a polymorphous transformation of the σ - into the α -phase as well as of the α - into the β -phase, exactly as it was the case with the above mentioned vanadium. There are 3 figures and 7 references, 2 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

PRESENTED: November 12, 1957, by A. A. Bochvar, Member, Academy of Sciences, USSR

SUBMITTED: November 12, 1957

Card 4/4

ZAKHAROV, V. I.; ZHAROVA, M. N.; SPICHKOVA, I. N.; KHATANOVA, N. A.
APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000721910013

Investigating phase transformations in iron-vanadium and iron-chromium alloys. Issl.po sharopr.splav. 4:263-265 '59.
(MIRA 13:5)

(Phase rule and equilibrium) (Iron-vanadium alloys)
(Iron-chromium alloys)

18.12.10

AUTHORS:

Zakharova, M. I., and Khatanova, N. A.

TITLE:

Investigation of the structure of solid solutions dependent on crystallization conditions and heat treatment

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Seriya fizicheskaya, v. 26, no. 3, 1962, 345 - 343

TEXT: The change in the block structure of the matrices with phase transformations of Al-Si and Al-Cu alloys was investigated. After being hardened at 550°C, single crystals of an alloy of Al with 1.2% Si were tempered at 218°C. The lattice constant changed from 4.0380 to 4.0386 Å after 10 minutes; and the block boundaries were clearly discernible after 20 minutes. The angle of disorientation of the blocks was measured by an X-ray reflection method. Single crystal plates with an area of 1 - 2 cm² were grown in a furnace with a temperature gradient of 10 degree·cm⁻¹. The alloy had a dendrite structure immediately after crystallization. Most of the crystals were not ideal and composed of relatively few blocks. After 2 min annealing at 280°C the maxima halve,

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S/048/62/026/003/003/015
B139/B104

Investigation of the structure...

showing that the blocks are disorientated by $4'$. The disorientation after 5 min is $6'$. After an annealing at 280°C for 10 min the blocks turn, and after 20 min the orientation of the blocks in a crystal increases. Consequently, the formation of the second phase from a solid solution of Si in Al causes a disorientation of the blocks. The structural changes are irreversible. Al alloys with 4 per cent by volume of Cu have a band structure under the same crystallization conditions, and the crystals consist of a multitude of minute blocks. After 20 min annealing at 218°C the distance between some of the reflected maxima increases, while another group of maxima remains unchanged. After annealing times of 30 - 60 min the samples again show the same picture as immediately after quenching. Consequently, after the coherent bond between the newly formed material and the matrix has broken, the disorientated blocks return to their initial position. However, this elastic disorientation has a local nature and covers the total crystal volume non-uniformly. The degree of inhomogeneity is determined by the substructure of the initial crystal of the solid solution. There are 6 figures and 4 references: 3 Soviet and 1 non-Soviet. The reference to the English-language publication reads as follows: A. Guinier, J. Tennevin, Acta crystallogr. 2, 133 (1949).

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S/659/62/008/000/002/028
I048/I248

AUTHORS: Zakharova, M.I., Mogarycheva, I.B., and Khatanova, N.A.

TITLE: Structure of the matrix during the initial stages of decomposition of the solid solution

SOURCE: Akademiya nauk SSSR. Institut metalurgii, Issledovania po zharoprochnym splavam. v.8. 1962. 27-31

TEXT: X-ray and microscopic examinations of various Al alloys and Mn steel during the initial stages of decomposition show that at 218°C of the Al-1.25% Si solid solution there is a generated stress not relieved by thermal relaxation, and the matrix is subject to plastic deformation. This is exhibited on the X-ray diagram by asterism and fragmentation of the Laue maxima for the solid solution. The same alloy, annealed for 10 minutes at 218°C, shows slip bands under the microscope, and disintegration of monocrystals into smaller structural blocks. Two slip-band systems, intersecting with each other at a 70° angle are observed under certain conditions. Essentially the same microstructure is observed in an Al -

Card 1/2

S/659/62/008/000/002/028
I048/I248

Structure of the matrix during the initial...

10% Zn alloy after natural aging for 7 months, and in steel containing 12% Mn and 1.2% C after annealing for 5 sec. at 670°C; electrochemical etching shows that the nature of the microstructure remains unchanged to a considerable depth within the alloy. As all three alloys mentioned have an f.c.c. lattice, the slip plane being (111), it is assumed that the appearance of two slip-band systems intersecting at 70° is associated with nucleation on the (111) and (111) planes. There are 3 figures.

Card 2/2

ZAKHAROVA, M.I.; KHATANOVA, N.A.

Changes in the substructure of the matrix during the decomposition
process of supersaturated solid solutions in aluminum alloys. Issl.
po zharoproch. splav. 10:64-67 '63. (MIRA 17:2)

ACCESSION NR: AP4039253

S/0032/64/030/006/0721/0724

AUTHORS: Zakharova, M. I.; Khatanova, N. A.

TITLE: Investigation of the substructure of single crystals by the x ray focusing method

SOURCE: Zavodskaya laboratoriya, v. 30, no. 6, 1964, 721-724

TOPIC TAGS: crystal substructure, x ray focusing, microblock, macroblock, goniometric measurement, aluminum alloy, angular disorientation, polycrystalline specimen, metal annealing, metal tempering, microscope UMV 100

ABSTRACT: The authors used the method of A. Guinier and I. Tennevin (Acta Crystal, 2, 133, 1949) to study the disorientation of a specimen of alloy during thermal or mechanical treatment. They measured the angular disorientation of a block to an accuracy of 10 seconds. The specimens they used had cross sections of the order of 1-2 cm². The thickness was determined by the atomic number of the alloy-forming element. For Al this is 1-2 mm. Goniometric measurements were made on specimens obtained from originally polycrystalline blocks by sending the latter through gradient furnaces at a speed of 10 mm/sec. The results of experiments on a block

Card 1/2

L 09008-67 EWT(m)/EWP(t)/ETI IJP(c) JD/JG/JH

ACC NR: AP6027785

(A)

SOURCE CODE: UR/0126/66/022/001/0055/0057

AUTHOR: Khatanova, N. A.; Zakharova, M. I.

39

ORG: Moscow State University im. M. V. Lomonosov (Moskovskiy gosuniversitet)

TITLE: A study of the initial stages of phase transitions in an Al-Cu-Ag alloy

SOURCE: Fizika metallov i metallovedeniye, v. 22, no. 1, 1966, 55-57

TOPIC TAGS: electron microscope, alloy phase diagram, aluminum base alloy, solid solution / UEMV electron microscope

ABSTRACT: The aging of the supersaturated solid solution of Cu in Al involves the formation of lamellar Guinier-Preston (G. P.) zones during the pre-segregation stage; the aging of the solid solution of Ag in Al involves the formation of spherical G. P. zones. In this connection the authors investigate the process of the decomposition of an Al-3 wt. % Cu-7 wt. % Ag alloy by analyzing anomalous effects on the roentgenograms of immobile monocrystals and by performing an electronmicroscopic analysis of thin foils following their aging at 130 and 218°C. Findings: the investigated specimens contain both lamellar and spherical G. P. zones. Following 30 min of aging at 218°C the photographs made with the aid of an UEMV-100 electron

UDC: 669.715:620.181.5:620.183.48:620.183.4

Card 1/3

L 09008-67 APPROVED FOR RELEASE: 09/17/2001

CIA-RDP86-00513R000721910013

ACC NR: AP6027785

microscope reveal thin lamellae of the γ -phase and spherical zones. The lamellae of the γ -phase, which have a hexagonal structure, produce on the photographs a contrast similar to packing defects in face-centered crystals. The quenched ternary alloy Al-Cu-Ag is characterized by pile-ups of defects, which show up as black dots on the photographs (Fig. 1, a).

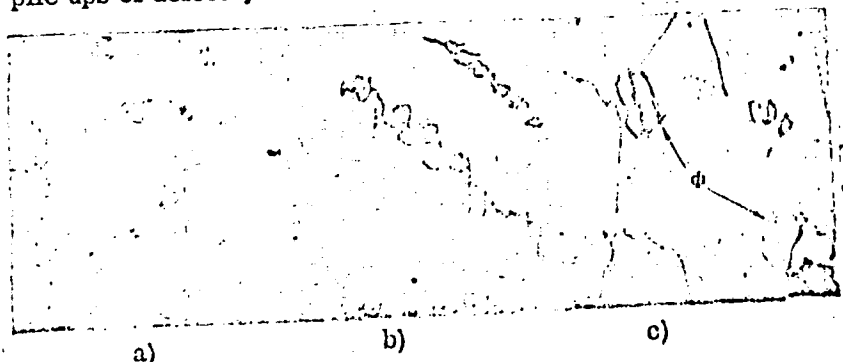


Fig. 1. Electron microphotographs of the ternary alloy
($\times 48,000$):
a - after quenching; b, c - after aging at 218°C for 30 min

I. 09003-67

ACC NR: AP6027785

It is probable that these black points represent, as in Au, pile-ups of interstitial atoms and vacancies. During aging at 218°C the vacancies acquire mobility which leads to, on the one hand, the segregation of Θ' - and γ' -crystals and, on the other, the interaction between vacancies and dislocations. After aging at 218°C for 30 min the number of the pile-ups of interstitial atoms and vacancies in the form of black dots greatly decreases and there appear helioids, dislocation loops (Fig. 1, b) and also Frank dislocations (Fig. 1, c). By contrast after quenching and aging at 130°C the Al-Cu-Ag alloy lacks dislocation loops and helioids. This indicates that the mobility of vacancies at room temperature and at 130°C in this alloy is much lower than in the binary alloys Al-Cu and Al-Ag. Therefore, the processes of the diffusion of dissolved atoms in the ternary alloy are retarded, and it is this that leads to the expansion of the temperature range of existence of lamellar G. P. zones. Orig. art. has: 6 figures, 1 table.

SUB CODE: 11,20/ SUBM DATE: 30Jul65/ ORIG REF: 003/ OTH REF: 003

Card 3/3 nst

KHATAROV, N. I.

Doc Geol-Min Sci - (diss) "Problems of endogenic processes in the light of experimental data." Moscow, 1961. 31 pp with diagrams; (Academy of Sciences USSR, Inst of Geochemistry and Analytical Chemistry imeni V. I. Vernadskiy); 250 copies; price not given; list of author's works on pp 29-31 (30 entries); (KL, 7-61 sup, 224)

KUCHINSKIY, I.N.; PYTEL', A.Ya.; ZISMAN, I.F.; GOLIGORSKIY, S.D.; CHEBANYUK,
G.M.; ZALEVSKIY, R.O.; RYABINSKIY, V.S.; DARENKOV, A.F.;
KHATAVNER, A.I.; SMELOVSKIY, V.P.; BALTER, M.A.

Abstracts. General problems in urology. Urinary bladder.
Urologiia 28 no.5:87-95 / S-0'63 (MIRA 17:4)

MARKOVSKIY, F.T.; SEL'YAVIN, G.F.; KHATAYEVICH, R.M.

Conditions of electric power consumption in the power system
of the Ukraine. Energ. i elektrotekh. prom. no.3:50-54 J1-S '62.
(MIRA 18:11)

1. Institut teploenergetiki AN UkrSSR.

KHATCHENKO, N.V.

Tumorous lesions of bones of the cranial arch. Zdrav. Belor. 5 no.4:
32-35 Ap '59.. (MIRA 12:7)

1. Iz kliniki nervnykh bolezney Minskogo meditsinskogo instituta
(zav.kafedroy - prof. M. A. Khazanov).
(SKULL--TUMORS)

KHATCHENKO, N. V., Cand of Med Sci -- (diss) "Tumor and Tumorigenic
Changes in Cranial Bones," Minsk, 1959, 12 pp (Minsk State Medical
Institute) (KL, 5-60, 130)

YURATSKAYA, Ye.G., kand.meditsinskikh nauk; KHATCHENKO, N.V., vrach;
ALEKSANDROVSKAYA, K.F., vrach

Etiopathogenesis of chondrodystrophy. Dzvav. Belor. 6
no. 7:13-15 Je '60. (MIRA 13:8)

1. Iz kliniki nervnykh bolezney Minskogo meditsinskogo
instituta (zaveduyushchiy kafedry - professor M.A. Khazanov).
(RICKETS, FETAI)

YURATSKAIA, Ye.G.; KHATCHENKO, N.V.; ALEKSANDROVSKAYA, K.F.

Etiology and pathogenesis of multiple cartilagenous exostoses.
Khim. med. 38 no.5:134-137 My '60. (MIRA 13:12)
(EXOSTOS)

MEL'YANKOV, S.Ya., assistant; KHATCHENKO, N.V., kand.med.nauk

Lumboscaral radiculities of tuberculous origin. Zdrav. Belor.
6 no. 10:35 0 '60. (MIRA 13:10)

1. Iz kliniki nervnykh bolezney Minskogo meditsinskogo instituta
(zav.kafedroy - prof.M.A. Khazanov).
(NERVES, SPINAL—DISEASES) (TUBERCULOSIS)

MEL'YANKOV, S.Ya.; KHATCHENKO, N.V.

Disorders of the muscular tonus of the gastrointestinal tract
in myotonia. Zhur. nevr. i psikh. 65 no.8:1150-1151 '65.

(MIRA 18:8)

1. Klinika nervnykh bolezney (zaveduyushchiy - prof. N.S. Misyuk)
Minskogo meditsinskogo instituta.

KODENTSOV, A.Ya.; QUBANOV, M.S.; YES'KOV, L.I.; KRACHENTSEV, V.I.;
KHATCHENOK, G.K.

Working part of the grab on a noncontinuous loader. Gpr. zhur
no.4:75 Ap '63. (MIRA 16:4)
(loading and unloading—Technological innovations)

TELEUGALIYEV, Tayman Musugaliyevich; ARZymbetov, S., red.;
KHATELOV, G., red.

[Desinfection of livestock buildings] Maldyn kora-zhailaryn
derileu. Almaty, Kainar, 1965. 62 p. [In Kazakhstan]
(MIRA 19:1)

KHATENESYAN, T.A.; CHIKHLADZE, E.S.

Phenology of the malarial mosquito *Anopheles bifurcatus* L. in Adzhar lowlands [with summary in English]. Med.paras. i paraz. bolezni. 23 no.1:18-20 Ja-F '59. (MIRA 12:3)

1. Iz parazitologicheskogo otdela Respublikanskoy sanitarno-epidemiologicheskoy stantsii Ministerstva zdravookhraneniya Adzharskoy ASSR (glavnyy vrach S.D. Avalishvili).

(MOSQUITOES,

Anopheles bifurcatus (Rus))

KHATENESYAN, T.A.

Survival of Anopheles bifurcatus mosquitoes to the epidemiologically dangerous age in Batumi District Adzhar Autonomous Republic. Med. paras.i paras.bol. 37 no.5:560-562 S-O '59. (MIRA 13:4)

1. Iz parazitologicheskogo otdela Respublikanskoy sanitarno-epidemiologicheskoy stantsii Ministerstva zdavookhraneniya Adzharskoy ASSR (glavnyy vrach S.D. Avalishvili).
(BATUMI DISTRICT--MOSQUITOES)
(ANOPHELES)

25681 HILSON, I. H.

Progressivyye novyy.

Tekstil. Prom—st', 1948, No. 6, s. 5-8.

SO: Letopis' Zhurnal'nykh Statey, No. 30, Moskva, 1948

KHATENEVER, I. M.

Khatenever, I. M. -- "Methods of Increasing the Effectiveness of the Operation of a Combing Machine in the Treatment of Machine-Picked and Low-Quality Cotton." Min Higher Education USSR, Moscow Textile Inst. Moscow, 1956. (Disseration For the Degree of Candidate in Technical Sciences).

So: Knizhnaya Letopis', No. 11, 1956, pp 103-114

KHATENEVER, I.M.

Role of grate bars in the quality of the carded sliver. Tekst.
prom. 16 no.8:51 Ag '56. (MLBA 9:10)

(Carding machines)

KHATENEVER, I.M.

Determining the effect of lap unevenness on the unevenness of the
card sliver. Tekst. prom. 18 no. 2:28-31 F '58. (MIRA 13:3)
(Cotton carding)

KHAT MEVUR, I.M.

Improving the process of producing absorbent cotton. Tekst.prom.

18 no.4:73 Ap '58.

(MIRA 11:4)

(Cotton manufacture)

KHATENEVER, I. M., Cand of ^{Text} Sciences --- (diss) "Means of Increasing
the Effectiveness of Operation of a Carding Machine During the Pro-
cessing of Cotton of the Machine Assembly and the Lower Sorters
and the Establishment of a Relationship of Irregularities in the
Carding Belt to Non-Uniformities in the Cloth,"
Moscow, 1959, 20 pp (Ministry of Higher and Secondary Specialist
Education RSFSR. Moscow Textile Institute) (KL, 6-60,123)

KHATENEVER, I.M.

Investigating the performance of flats with all-metal saw blade.
Izv. vys. ucheb. zav.; tekhn. tekst. prom. no.5:78-81 '59 (MIRA 13:3)

1. Moskovskiy tekstil'nyy institut.
(Carding machines)

KHATENEVER, I.M., inzh.

Modernization of the ChVM-600 carding machine for the
manufacture of absorbent and padding cotton. Tekst.prom. 19
no.12:57-59 D '59. (MIRA 13:3)
(Carding machines) (Cotton carding)

KHATENEVER, I.M., kand.tekhn.nauk

Increasing the operative efficiency of carding machines.

Tekst. prom. 20 no. 12:65-68 D '60.

(MIRA 13:12)

(Carding machines)

KHATENEVER, I.M., kand.tekhn.nauk

Ways of improving the quality of raw materials for the manufacture of
wadding. Tekst.prom. 21 no.5:15-16 My '61. (MIRA 15:1)
(Cotton manufacture)

KHATENEVER, I.M., kand.tekhn.nauk

For an advanced technology in batting production. Teskt.prom.
23 no.1:79-81 Ja '63. (MIRA 16:2)

1. Starshiy inzhener TSentral'noy nauchno-issledovatel'skoy
laboratorii khlopka i shersti Moskovskogo gorodskogo soveta
narodnogo khozyaystva.
(Nonwoven fabrics)

KHATENEVER, I.M., kand. tekhn. nauk

For a maximum utilization of the capacity of the AchV-V carding and knitting unit. Tekst. prom. 23 no.9:23-25 S '63.

(MIRA 16:10)

1. Starshiy inzh. TSentral'noy nauchno-issledovatel'skoy laboratorii (TsNIL) khlopka i shersti Moskovskogo gorodskogo soveta narodnogo khozyaystva.

(Textile machinery)

KHATENEVER, I.M., kand. tekhn. nauk

Widen the assortment of cotton wadding interlining. Tekst.
prom. 24 no.8:54-56 Ag '64. (MIRA 17:10)

1. Starshiy inzh. Tsentral'noy nauchno-issledovatel'skoy
laboratorii khlopka i shersti Soveta narodnogo khozyaystva
Moskovskogo gorodskogo ekonomicheskogo rayona.

KHATENEVER, I.M., kand. tekhn. nauk

Manufacture of half-woven interlining on AChV-V machine units.
Tekst. prom. 25 no.4:42-45 Ap '65. (MIRA 18:5)

1. Starshiy inzh. TSentral'noy nauchno-issledovatel'skoy
laboratorii khlopka i shersti Soveta narodnogo khozyaystva
Moskovskogo gorodskogo ekonomicheskogo rayona.

KHATENEVER, M.L.

Fate of BCG bacteria following epidermal administration of vaccine to animals. Zhur.mikrobiol.epid. i immun. no.8:96-102 Ag '55.

(MLRA 8:11)

1. Iz otdela spetsificheskoy profilaktiki i terapii tuberkuleza (zav.--prof. A.I.Togunova) Instituta epidemiologii i mikrobiologii imeni N.F.Gamalei AMN SSSR (dir.--prof. V.D.Timakov)

(BCG VACCINATION, experimental,
epicutaneous admin.)

BCG inoculated intracutaneously into guinea pigs as a rule invade the animal. The concn. of BCG reaches a max. in adjacent lymphatic glands during the first 2-3 weeks and then decreases after 2-3 months. Distribution-time curves of the bacteria differ with various prep. of liquid and dry vaccines. During the second week after vaccination the bacteria can be found in more distant lymph glands but in relatively smaller amounts. They have also been found in bone marrow, blood, and kidneys. After 9 months, BCG bacteria are rarely demonstrated. The most reasonable concn. in the liquid vaccine appears to be 20 mg./ml.

KHATENEVER, M.L.
LESHCHINSKAYA, Ye.N.; KHATENEVER, M.L.

Studying the biological properties of BCG cultures grown on
a VKL medium with zinc. Zhur. mikrobiol. epid. i immun 28 no.2:135-136
P '57 (MLRA 10:4)

1. Institut imeni N.F. Gamalei AMN SSSR.
(BCG) (BACTERIOLOGY--CULTURES AND CULTURE MEDIA)

KHATENEVER M.L.

TOGUNOVA, A.I.; KULIKOVA, M.F.; KHATENEVER, M.L.

Characteristics of substrains of BCG. Zhur.mikrobiol.epid. i immun.
29 no.3:3-8 Mr '58. (MIRA 11:4)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei AMN SSSR.
(MYCOBACTERIUM TUBERCULOSIS BOVIS,
BCG, sub-strains (Rus)

STEPANCHENOK, G.I.; TOGUNOVA, A.I.; KHATENEVER, M.L.; KULIKOVA, M.F.

Effect of ultrasound on Mycobacterium tuberculosis. Zhur.
mikrobiol.epid. i immun. 30 no.5:90-95 My '59. (MIRA 12:9)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei
AMN SSSR.

(MYCOBACTERIUM TUBERCULOSIS, eff. of radiations.
ultrasonics (Rus))

(ULTRASONICS, eff.
on M. tuberc. (Rus))

TOGUNOVA, A.I.; KHATENEVER, M.L.; ZHULINA, L.V.

Immunobiological properties of antigenic complexes from Mycobacterium tuberculosis. Zhur. mikrobiol., epid. i immun. 32 no.9:116-120 S '61.
(MIRA 15:2)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei ANU SSSR.
(MYCOBACTERIUM TUBERCULOSIS)
(ULTRASONIC WAVES--PHYSIOLOGICAL EFFECT) (IMMUNOLOGY)

TOGUNOVA, A.I., prof.; KHATENEVER, M.L.

White mice as a model for the study of immunogenic activities
of vaccinal strains. Probl.tub. 39 no.3:88-93 '61. (MIRA 14:5)

1. Iz Instituta epidemiologii i mikrobiologii imeni akad.
N.F. Gamalei (dir. - prof. S.N. Muromtsev [deceased]) AMN SSSR.
(BCG VACCINATION) (MICE AS LABORATORY ANIMALS)

TOGUNOVA, A. I., prof.; ZHULINA, L. V., kand. med. nauk;
KHATENEVER, M. L.

Antigens and "crude extracts" of mycobacterium tuberculosis.
Probl. tub. 40 no.4:71-76 '62. (MIRA 15:6)

1. Iz Instituta epidemiologii i mikrobiologii imeni N. P. Gamalei
AMN SSSR (dir. - prof. O. V. Baroyan)

(MYCOBACTERIUM TUBERCULOSIS)
(ANTIGENS AND ANTIBODIES)

KHATENEVER, M.L.

Simultaneous vaccination against tuberculosis and tularemia under
experimental conditions. Zhur. mikrobiol., epid. i imm. 41 no. 2:
29-34 F '64. (MIRA 17:9)

KHATETOVSKIY, G.I.; YUSHKEVICH, Ye.V.

Assembly of turbine units and auxiliary equipment of the machine
hall. Energ.stroi. no.24:60-64 '61. (MIRA 15:4)

1. Starshiy proizvoditel' rabot montazhnogo uchastka tresta
"Sevzapenergomontazh" (for Khatetovskiy). 2. Proizvoditel'
rabot montazhnogo uchastka tresta "Sevzapenergomontazh" (for
Yushkevich).

(Harva region--Electric power plants--Design and construction)
(Steam turbines)

L 14009-66 EWT(1)/EWT(m)/EWP(j)/EWP(t)/EWP(b) LJP(c) JD/RM

ACC NR. AP6003501

SOURCE CODE: UR 0364/66/001/001/0107/0109

AUTHOR: Yeligulashvili, I. A.; Nakashidze, G. A.; Rozenshteyn, L. D.; Khatlashvili, A. A.

ORG: Institute of Semiconductors, Academy of Sciences SSSR, Leningrad
(Institut poluprovodnikov Akademii nauk SSSR); Institute of Cyber-
netics, Academy of Sciences GruzSSR (Institut kibernetiki Akademii
nauk GruzSSR)

TITLE: Conductivity nonlinearity effects due to charge carrier
injections in organic semiconductors

SOURCE: Elektrokimiya, v. 2, no. 1, 1966, 107-109

TOPIC TAGS: organic semiconductor, anthracene, volt ampere charac-
teristic, cuprous iodide, aluminum, contact effect

ABSTRACT: Research aimed at studying conduction processes associated
with charge-carrier injection into organic semiconductors has been
started. It is noted that lately a great deal of attention has been
paid to the problem of obtaining nonlinear and nonsymmetrical volt-
ampere characteristics for organic semiconductors. To this end an
organic semiconductor-electrode contact was constructed by applying
2 CuI electrodes, or a CuI and an aluminum electrode by vacuum

Card 1/2

UDC: 621.315.592:547

L 14009-66

ACC NR: AP6003501

sputtering across single crystals of anthracene. It was found that a nonlinear volt-ampere characteristic is obtained, $i \sim v^n$, where $n = 8-10$, regardless of the nature of the second electrode; the characteristic is symmetrical if the electrodes are both of CuI, and nonsymmetrical if one is CuI and the other Al. At the highest voltage used (~ 500 v), the rectification factor attained 3-5 orders [sic]. It was shown that conductivity is determined by the injection of holes from the CuI electrode into the anthracene crystal, and that injection is increased by illumination of the CuI electrode with monochromatic light of the appropriate wavelength. Orig. art. has: 3 figures. [SM]

SUB CODE: 20/ SUBM DATE: 11May65/ ORIG REF: 001/ OTH REF: 006
ATD PRESS: 4196

Card 2/2 *SC*

Country : USSR
Category: Cultivated Plants. Fruits. Berries.

M

Abstr Jour: RZhBiol., No 22, 1958, No 100458

Author : Khatishvili
Inst : Georgian Agr. Inst.
Title : Determination of the Time of Blossoming and of
the Fertilizing Ability of Pollen in Local Pear
Varieties in the Conditions of Mukhran'.

Orig Pub: Nauchn. tr. stud Gruz. s.-kh. in-t, 1957, 6-7,
57-63

Abstract: Cited are data of the 1952-1953 observations
on the opening of the buds, the beginning and
duration of blossoming, and also the results
of experiments in the study of the fertilizing

Card : 1/4

M-160

"APPROVED FOR RELEASE: 09/17/2001

CIA-RDP86-00513R000721910013

Country : USSR
Category: Cultivated Plants. Fruits. Berries.

Abstr Jour: RZhBiol., No 22, 1958, No 100458

ability of the pollen of different pear
varieties in the conditions of Mukhrani
(Georgia). From the local pear varieties,
Gulabi, Knechchuri, Kalos Mskhali, Panta
Mskhali, Gvordtsiteli and Borbala Mskhali
were studied; and from the varieties of other
regions - Vil'yams, Beurre Bosc and Lesnaya
krasavitsa. With the exception of Gvordtsi-
teli and Borbala mskhali, the local pear
varieties began to blossom 5-8 earlier than
those from other regions. The earliest blos-
soming was recorded in Panta Mskhali variety
and the latest - in Gvordtsiteli and Borbala

Card : 2/4

KUTATELIDZE, K.S.; ZEDGENIDZE, Ye.N.; KHATIAHVILI, E.G.

Lightweight refractories from screenings and ashes of liptebielith
shale. Ogneupery 18 no.8:361-367 '53. (MIRA 11:10)

1. Institut metalla gornogo dela AN GruzSSR.
(Refractory materials) (Shale)

MECHEDLOV-PETROSYAN, O.M.; GOGICHEVA, Kh.I.; KHATIASVILI, E.G.;
NORAKIDZE, G.K.

Laboratory study of the effect of vacuum compression on certain
properties of forsterite refractories. Trudy Inst. prikl. khim.
i elektrokhim. AN Gruz. SSR no. 1:183-186 '60. (MIRA 14:2)
(Forsterite)

15 2610

26037
S/137/61/000/007/002/072
A060/A101

AUTHORS: Mchedlov-Petrosyan, O. M.; Gogicheva, Kh. I.; Khatlashvili, E. G.;
Norakidze, G. K.

TITLE: Laboratory investigation of the effect of vacuum extrusion upon
some properties of forsterite refractories

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 7, 1961, 4, abstract 7B22
("Tr. In-ta prikl. khimii i elektrokhimii. AN GruzSSR", 1960, v. 1,
183-186)

TEXT: It is established that the effect of vacuum upon the properties of
objects largely depends on the grain composition of the mixture, the extrusion
pressure and the baking temperature. At low baking temperatures extrusion under
vacuum does not change the porosity of objects. In the presence of a great
amount of coarse fractions in the granular structure vacuum does not show a
noticeable effect on the porosity. An increase in extrusion pressure at the
same vacuum and almost the same granular composition lowers the apparent porosity.
Vacuum shows the greatest effect with medium grain size and a not very low (not
below 1,600°C) baking temperature. In these cases the decrease in the apparent

Card 1/2

26037

S/137/61/000/007/002/072

A060/A101

Laboratory investigation of the effect ...

porosity constitutes 5-20 percent and attains values of the order of 4 percent. The addition of a considerable amount of crude serpentine while using vacuum yields good results. The effect of extrusion in vacuum on thermal stability is small. Slag stability is almost always better for vacuum specimens. A diagram of a vacuum extrusion set-up is given and the method of testing is described.

V. Oparysheva

[Abstracter's note: Complete translation]

Card 2/2

KHATIASHVILI, E.G.

PHASE I BOOK EXPLOITATION

SOV/277

Akademiya nauk Gruzinskoy SSR. Institut prikladnoy khimii i elektro-
tekhniki.

Trudy, t. 1 (Academy of Sciences of the Georgian SSR. Institute of Applied
Chemistry and Electrochemistry. Transactions) v.1. Tbilis, 1960.
186 p. Errata slip inserted.

Personalities cannot be established in Georgian writing.

PURPOSE: This collection of articles is intended for mineralogists; metal-
lurgists, and mining specialists.

COVERAGE: The collection contains articles concerning recent research on
methods for treating antimony- and arsenic-bearing ores and carbonate
ores of manganese. Research on the electrochemical properties of certain
ores and their electrodeposition is also discussed. The collection includes

Card ~~4/5~~

18

Institute of Applied Chemistry (Cont.)

SOV/5277

studies on the corrosion and electrical properties of certain alloys, studies of the properties of certain cements and cement components, and studies of certain phases of the cement production process. The following personalities are mentioned: Professor H. A. Figurovskiy and his scientific assistant T. B. Gavrilova (p. 112, bottom); R. I. Agladze, Academician, AN GSSR (AS Georgian SSR) (p. 150); S. D. Dzhaparidze and N. I. Lagidze (p. 171). The articles which are written in Georgian are followed by a resumé in Russian. References accompany each article.

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Mathematical Reviews
Vol. 15 No. 1
Jan. 1954
Mechanics

On the deformation of a cylindrical composite beam with a loaded lateral surface. Soob. Akad. Nauk Gruz. SSR 13, 335-341 (1952). (Russian)

The deformation of a homogeneous elastic beam when one of its bases is fixed and the other is free and when traction on the lateral surface is independent of the coordinate along the axis of the beam was solved by J. H. Michell and G. Allen [Proc. Roy. Soc. (London), Mathematical theory of elasticity, 4th ed., Cambridge, 1927, pp. 343-359]. The author extends the solution of this problem to a compound beam whose cross-section consists of m regions S_i bounded by non-intersecting contours L_i contained within the region S_0 bounded by L_0 . The contour L_0 corresponds to the trace of the lateral surface.

The elastic media filling the regions S_i ($i = 0, 1, 2, \dots, m$), may have distinct Young's moduli E_i , but the Poisson ratios are supposed to be the same throughout the cross-section. The components of the stress tensor are assumed to have special forms involving four unknown functions; three of these can be determined by solving certain two-dimensional Neumann problems in Laplace's equation and the fourth by solving the standard boundary-value problem in the biharmonic equation. The expressions for displacements are given in terms of these functions. I. S. Sokolnikoff.

KHATIASHVILI, G.M.

Deformation of a composite bundle of cylindrical bars subjected to lateral stresses which are varying along the generatrix of the cylinder. Soob.AN Grus.SSR 14 no.4:197-204 '53. (MLRA 7:3)

1. Tbilisskiy institut inzhenerov zheleznodorozhnogo transporta im. V.I.Lenina.

(Deformations (Mechanics)) (Elastic rods and wires)

KHATIASVILI, G. N.

"Elastic Equivalence of a Cylindrical Composite Beam with a Loaded Lateral Surface." Cand Phys-math Sci, Tbilisi Mathematics Institute
A. N. Razmadze, Acad Sci Georgian SSR, Tbilisi, 1954. (EL, No 7, Feb 55)

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Elastic equilibrium of a composite cylindrical bar with a lateral supporting surface in an instance of varying Poisson's ratio. Soob. AN Gruz.SSR 16 no.1:19-25 '55. (MIRA 8:12)

1. Tbilisskiy institut inzhenerov sheleznodorozhnogo transporta imeni V.I.Lenina. Predstavleno akademikom N.I.Muskhelishvili
(Elastic rods and wires)

KHATIASHVILI, G.M.

Elastic equilibrium of a compound cylindric bar subjected to a lateral load that changes along the generatrix of the cylinder.
Soob. AN Gruz.SSR 18 no.4:393-400 Ap '57. (MLRA 10:7)

1. Tbilisskiy institut inzhenerov zheleznodorozhnogo transporta
in. V. I. Lenina. Predstavleno akademikom M.I. Muskhelishvili.
(Elastic rods and wires)

The elastic equilibrium of a circular ...

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... components along the 3 axes. It is assumed that ...

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PHASE I BOOK EXPLOITATION

SOV/5962

Vsesoyuznoye soveshchaniye po vychislitel'noy matematike i primeneniyu sredstv vychislitel'noy tekhniki, Baku, 1958.

Trudy (Transactions of the All-Union Conference on Computer Mathematics and Applications of Computers) Baku, Izd-vo AN Azerbaydzhanskoy SSR, 1961. 254 p. 500 copies printed.

Sponsoring Agency: Akademiya nauk Azerbaydzhanskoy SSR. Vychislitel'nyy tsentr.

Eds.: A.A. Dorodnitsyn, S.A. Aleskerov, and K.F. Shirinov; Ed. of Publishing House: A. Til'man; Tech. Ed.: T. Ismailov.

PURPOSE: The book is intended for mathematicians and other specialists interested in computer theory and uses for computers.

COVERAGE: The book contains the texts of 24 papers presented at the All-Union Conference on Computer Mathematics and Applications of Computers held in Baku, 3-8 Feb 1958. The "Resolution"

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Transactions of the All-Union (Cont.)

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of the conference, consisting of proposals for accelerating the development of computer mathematics and computer engineering, is also included.

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KHATIASHVILI, G.M.

Almansi-Michell's problem for a composite beam. Trudy Vych.
tsentra AN Gruz.SSR 2:213-239 '62. (MIRA 16:1)
(Boundary value problems) (Elasticity)

ACCESSION NR: AR4031080

S/0044/64/000/002/B108/B108

SOURCE: Referativnyy zhurnal. Matematika, Abs. 2B431

AUTHOR: Khatiasvili, G. M.

TITLE: The Al'mansa-Mitchel' problem for a compound anisotropic cylindrical beam

CITED SOURCE: Tr. Vy*chisl. tsentra. AN GruzSSR, v. 3, 1962(1963), 161-184

TOPIC TAGS: Al'mansa-Mitchel' problem, compound anisotropic cylindrical beam, boundary value problem, second order equation, fourth order equation, contact surface stress condition

TRANSLATION: The method set forth in the previous article (abs 2B430) for a homogeneous anisotropic beam, affected by arbitrary forces applied to the lateral surface and not changing along the generatrix, is generalized to the case of a compound beam in the form of a cylinder or prism with longitudinal cylindrical cavities, filled with a different anisotropic material; the beam is affected along its external lateral surface by forces which do not change along the

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ACCESSION NR: AR4031080

generatrix. As in the case of a homogeneous beam, the author reduces the problem to four boundary value problems for the four functions $f_j(x, y)$ ($j = 1, 2, 3, 4$) satisfying 2nd order equations, and for the one function $\bar{\Psi}(x, y)$ satisfying a 4th order equation, but in this case, in addition to the conditions on the outer surfaces, stress conditions on the contact surfaces must also be fulfilled. Much attention is paid to a rigorous mathematical proof of this method.
S. Lekhnitskiy

DATE ACQ: 19Mar64

SUB CODE: PH

ENCL: 00

Card 2/2

KHATIASHVILI, G.M.

Elastic equilibrium of a sectional orthotropic cylindrical
beam with a loaded lateral surface. Trudy Mat. inst. AN Gruz.
SSR 28:185-207 '62. (MIRA 16:8)

(Beams and girders) (Elasticity)

KHATIASHVILI, G.M.

Almansi problem for a homogeneous orthotropic cylinder.
Aplikace mat. 8 no.4:231-260 '63.

1. Vychislitel'nyy Tsentr Akademii Nauk Gruzinskoy SSR,
Akurskaya 8 , gorod Tbilisi.

KHATIASHVILI, G.M.

Almansi's problem for a sectional orthotropic cylindrical body. Trudy
Mat. inst. AN Gruz. SSR 29:245-259 '63. (MIRA 17:12)

St. Venant's problems for sectional orthotropic bodies approaching
prismatic ones. Trudy Mat. inst. AN Gruz. SSR 29:261-269 '63.

KHATIASHVILI, G.M.

Problem of the flexure by a transverse force of sectional
orthotropic bodies close to prismatic ones. Soob. AN Gruz.
SSR 32 no. 1:35-42 0 '63. (MIRA 17:9)

1. Vychislitel'nyy tsentr AN GruzSSR. Predstavleno akademikom
N.P.Vekua.

KHATIAHVILI, G.M.

Almansi's problem for a sectional anisotropic cylindrical body.
Trudy Vych. tsentr. AN Gruz.SSR 4:29-42 '64 (MIRA 17:6)

Almansi's problem for a homogeneous anisotropic, cylindrical
body. Ibid.:43-70.

St. Venan's problems for sectional anisotropic nearly pris-
matic bodies. Ibid.:87-90